Kingston eHealth

July 1, 2002

Office of the Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-A325
Washington, DC 20554

Dear Chairman Powell:

This letter is in response to the Federal Communication Commission's (FCC), Notice of Proposed Rulemaking in the matter of the Universal Service Rural Health Care Support Mechanism, FCC 02-122, (WC Docket No.02-60) that seeks comment on, among other things, the FCC's Universal Service Program's eligible health providers, Internet access, calculation of discounted services, insular areas and streamlining the RHCP application process.

If we examine the Telecommunications Act of 1996 to understand the original intent of the program, it affirms that:

> "Consumers in all regions of the Nation including low-income consumers and those in rural, insular, and high cost areas should have access to telecommunications and information services, …that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."

And outlines the mechanism to aid rural health care providers:

> "A telecommunications carrier shall, upon receiving a bona fide request, provide telecommunications services which are necessary for the provision of health care services in a State, including instruction relating to such services, to any public or nonprofit health care provider that serves persons who reside in rural areas in that State at rates that are reasonably comparable to rates charged for similar services in urban areas in that State. A telecommunications carrier providing service under this paragraph shall be entitled to have an amount equal to the difference, if any, between the rates for services provided to health care providers for rural areas in a State and the rates for similar services provided to other customers in comparable rural areas in that State treated as a service obligation as a part of its obligation to participate in the mechanisms to preserve and advance universal service."

The FCC created the Universal Service Rural Health Care Program (RHCP) to implement the Telecom Act's intent but it continues to be underutilized despite five years experience and recent reforms. The Rural Health Care Program has funded relatively few eligible providers-fewer than 1,200- since its inception, according to the Universal Service Administration Corporation (USAC). In the year 2000, fewer than 750 applicants were funded out of a possible 8,300, or so eligible providers. Part of the reason is that many in need of the support mechanism do not qualify for the discount or do not greatly benefit from the discount as it is currently calculated. While the FCC has undertaken important regulatory reforms to reshape the RHCP[1], it is clear that fundamental problems associated

[1] On November 3, 1999, the FCC released its Fourteenth and Fifteenth Orders on Reconsideration of the Universal Service Order, which addressed a number of concerns about the Rural Health Care Program. Among other things, the Orders:

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with this program cannot be resolved without legislative action. Moreover, in light of the recent terrorist attacks on the United States, it may be critical at this juncture for the FCC and Congress to step back and reassess the larger goals and purpose of the Rural Health Care Program. Today, the Nation faces an urgent need to develop an integrated network of health care providers, who can diagnose, treat, and contain possible outbreaks of disease, or the aftermath of bioterrorism attacks in both urban and rural areas. Not only must this network be capable of diagnosis and treatment but it must also be able to rapidly respond in these situations.

> In public health, a strong infrastructure [would] provides the capacity to prepare for and respond to both acute and chronic threats to the Nation's health, whether they are bioterrorism attacks, emerging infections, disparities in health status, or increases in chronic disease and injury rates. Such an infrastructure serves as the foundation for planning, delivering, and evaluating public health. The public health infrastructure comprises the workforce, data and information systems, and public health organizations.[2]

Based on the FCC's statutory mandate to make "available, so far as possible, to all the people in the United States…a rapid, efficient Nation-wide…wire and radio communications service with adequate facilities at reasonable charge, for the purpose of the national defense, [and] for the purpose of promoting safety of life and property thought the use of wire and radio communications,[3] Congress should broaden the goals and purpose of the existing Rural Health Care support mechanism to help support and develop a comprehensive National Public Health Infrastructure.

Telemedicine and Telehealth projects have already laid the groundwork for a system that integrates advanced technology and telecommunications with health care provision at urban hospitals connected to rural clinics. In many cases independent telemedicine networks use existing state telecommunications networks to interconnect to other telemedicine projects. Thus, Telemedicine providers have already grappled with technical issues such as open architecture, interconnection, interoperability, and scalability as well as security, privacy and confidentiality issues that arise when using advanced communications systems for health care provision.

A Public Health Infrastructure

Currently, there is no fully integrated national public health infrastructure. Rather, a highly fragmented patchwork of national, state, and local public health providers coexist together with very limited interconnecting communications systems. There are no formal standard protocols among these providers to electronically communicate and share essential information or data with each other, although State Health Services Departments do report certain diseases to the CDC on a monthly basis.

Currently, the Centers for Disease Control and Prevention (CDC) have a nascent Health Alert System that will eventually connect to all State Health Services Departments and some other organizations. States have their own Departments of Health Services that, among other things, monitor and report certain diseases to the CDC; license health providers such as doctors; and gather/ compile health and disease statistics. However, these State and local Health Service Departments vary from state to state

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- Expanded the definition of Eligible Telecommunications Carriers (ETCs) to include long distance telecommunication carriers, retroactively;
- Streamlined some aspects of the application process;
- Calculated discounts on actual distance based charges paid by the health care facilities rather than published tariffs; and
- Supported any commercially available telecommunications service regardless of bandwidth.

[2] Department of Health and Human Services, Health People 2010, Nov. 2000.page 23-11.

[3] 47 U.S.C.§ 151.

and city to city in terms of funding, sophistication, and ability to rapidly analyze and report information to national and Federal organizations.

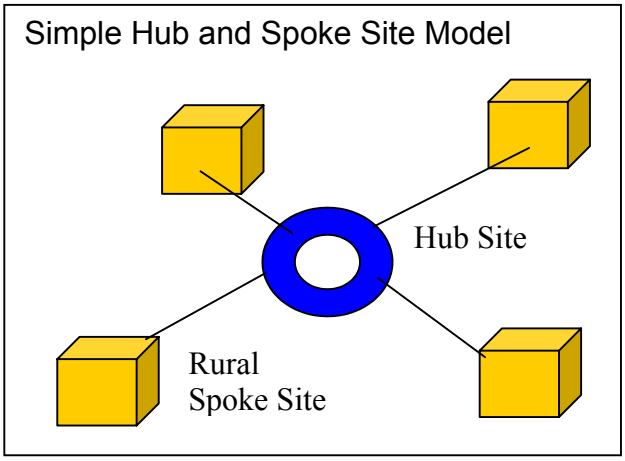
Recently, the CDC and the Health Resources and Services Administration, (HRSA) published their "Healthy People 2010 Report" that notes how State and local Health Services Departments' resources vary:

> Unpublished data from a 1999 survey of the National Association of County and City Health Officials showed 49 percent of local health department directors had continuous, high-speed access to the Internet at work. Further, 83 percent of local health departments had staff members who can search for and access public information on the Internet. The Bioterrorism Initiative, which began in 1999, is expected to generate information on Internet and e-mail capacity at State and local levels for responding to terrorist events; this information could be used in monitoring this objective.[4]

This report also describes the Public Health Infrastructure as "the people who work in the field of public health, information and communication systems used to collect and disseminate accurate data, and public health organizations at the State and local levels in the front lines of public health. The public health infrastructure is a complex web of practices and organizations that has been characterized as in "disarray."

Telemedicine and Telehealth Networks

Telemedicine and Telehealth projects throughout the United States have used advanced technology and telecommunications to provide health care services and medical education at a distance for some time. Inherent in these networks and systems is the capture, dissemination and exchange of data, images, interactive video and medical information as well as the dissemination of medical education among and between sites. Some telemedicine projects have also begun to integrate health informatics systems into their networks, which give them the ability to rapidly analyze medical and other information that they gather from patients.



Historically, numerous US telemedicine projects have been configured to resemble a simple hub and spoke model as illustrated in Box 1. In many cases, an urban hub site will be a University hospital or a tertiary care facility that can provide a wide array of specialty care to rural clinics and hospitals in surrounding rural areas via telecommunications lines directly connecting the hub with each spoke site. In more complicated and mature models, independent telemedicine projects in a state may join together and interconnect existing telemedicine projects, resulting in a web of rural and urban hub sites. For example, a recent grant application to the Rural Utilities Service proposed a statewide Hawaiian telemedicine project that interconnects a

[4] .All workers within a State or local public health agency need access to the Internet or other electronic information systems appropriate to their job functions. Access requires hardware (for example, computers, modems, CD-ROM drives), software that can browse the Internet and can be used to analyze health information databases, and training on the effective use of the Internet and database systems. Adequate capacity in public health informatics—the systematic application of information and computer science and technology to public health practice, research, and learning—is key to this objective. Public health agencies need to provide appropriate training on data sources and how to transform the data retrieved from these systems into information that can be used to develop public health policy. (From Department of Health and Human Services, Health People 2010, Nov. 2000.page 23-11)

number of independent telemedicine projects throughout the Hawaiian Islands, using the STAN system as a common communications backbone.

These statewide Telehealth projects could serve as part of the foundation for an integrated National Public Health Infrastructure. At the same time, the Rural Health Care Universal Service support mechanism would help link other independent projects together and create greater incentives for the build out of an integrated system. Thus, rather than pursue further incremental regulatory reforms, Kingston eHealth strongly recommends that the FCC, Congress and an Advisory Committee work to amend the original Universal Service language regarding the urban rural differential, and that the new legislative language broaden the goals and purpose of the Rural Health Care Program to include the support and development of a comprehensive and integrated National Public Health Infrastructure. The FCC could do so by adopting the Schools and Libraries Model for the Rural Health Care Program and harmonizing the RHCP with the Schools and Libraries Program.

Eligible Providers (Section III Paragraph 13)

Emergency Medical Service Providers
As discussed above, since the September 11th terrorist attacks on the United States, the Nation has been keenly aware of the need for an integrated public health infrastructure that can adequately respond to future attacks. If the FCC broadens the scope of the RHCP to include the development of such an infrastructure, then emergency medical service providers, who could rapidly respond to state, local and national emergencies should be included under eligible providers.

Eligible Services (Section III paragraph 18)

Internet Access (Section III. Paragraph 18)
The Internet is a critical part of the nascent integrated National Public Health Infrastructure. A number of State Health Services Departments already use the Internet to send monthly information about certain diseases to the CDC but State and local resources for communications and advanced technologies as well as staff vary from state to state and local government to local government. Given the important role of the Internet in public health, the Department of Health and Human Services has outlined specific objectives related to Internet Access in its Healthy People 2010 Report: "Increase the proportion of Tribal, State, and local public health agencies that provide Internet and e-mail access for at least 75 percent of their employees and that teach employees to use the Internet and other electronic information systems to apply data and information to public health practice.[5]"

If the RHCP's mandate is broadened to encompass the support of a national Public Health Infrastructure, the FCC could play an important role in galvanizing wider use of the Internet by health care providers in the United States. Especially if it used the Rural Health Care support mechanism to promote any form of Internet access provided to rural and urban health care providers.

Calculation of Discounted Services (Section III, Paras.30-49)

Urban Area (Section III Paragraph 30)
The FCC currently calculates its urban rate using rates found in the nearest city to the rural health applicant with at least 50,000 people. Historically the FCC assumed that "services used by rural health care providers would likely involve transmission links to the nearest city." However, many

[5] Department of Health and Human Services, Health People 2010, Nov. 2000.page 23-11.

telemedicine projects' hub sites are located in large urban areas that support a wide range of high quality specialty and subspecialty care. [6]This should not come as a surprise to the FCC, given that its own experts - the FCC's Advisory Committee on Telecommunications and Health Care[7] -proposed what it called its "market basket" of "essential telemedicine applications" that would be "necessary to support rural telemedicine efforts." This market basket included a wide range of specialty services – such as radiology, selected cardiology, dermatology, pathology, obstetrics (fetal monitoring), pediatric, and mental health/psychiatric services. Since these types of specialty and subspecialty care are not widely available in smaller cities close to rural areas, rural health providers will often go to a larger urban community for a particular subspecialty like a pediatric cardiologist.

Under the simple hub and spoke model, the urban hub site often negotiates both the rural and urban telecom rates for the entire networked project. As more mature telemedicine and Telehealth projects develop into statewide or cross state networks, the FCC's urban rate calculations, MAD and other requirements will not be appropriate.

Insular Areas (Section III Paragraph 49)

In 1999, the Office for the Advancement of Telehealth (OAT) filed FCC comments on underserved insular areas with the FCC. These comments were in response to the FCC's Further Notice of Proposed Rulemaking on Universal Service: Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas, CC Docket No. (96-45). In their comments, OAT highlighted how the area's unique geography, demography and poverty as well as its inadequate numbers of qualified health care providers adversely impact the health of Pacific Islanders.

According to OAT, at the time of its filing, the U.S. Associated Pacific Basin consisted of six jurisdictions: American Samoa, Commonwealth of the Northern Mariana Islands (CNMI), and Guam, which are part of the United States' Flag Territories. The Federated States of Micronesia (FSM), Republic of the Marshall Islands (RMI), and Republic of Palau (ROP) are freely associated States that have a compact with the United States. These six jurisdictions had about 454,000 people spread across 104 inhabited islands covering an area of the Pacific larger than the continental United States. More than 50% of Palau and FS Micronesia's population lived below the poverty line. While about 25% on Guam and 33% in the CNMI were living below the poverty line. In other areas, poverty levels were much higher – about 63% of the people in Palau, 68% in American Samoa, and more than 91% in the Federated States of Micronesia lived below the poverty level.

Since 1999, all the jurisdictions have been actively engaged in planning for increased Telehealth and Telemedicine activities in the Pacific Basin. Under a Department of Health and Human Services' Pacific Basin Telehealth Initiative, OAT funded a jurisdictional Telehealth Plan for the area, mapping out the introduction of greater telemedicine services in their area with the belief that RHCP would eventually reform its program and provide transmission cost discounts in the Pacific Insular areas. These discounts have not yet occurred because the FCC uses an urban rate based on charges found in the nearest "large city in the state' as a benchmark to calculate the rural health discount in these jurisdictions.

Kingston eHealth believes that using an urban rate based on charges found in the "nearest large city in the state" as a benchmark to calculate rural health discount rates for telecommunications services in the Pacific insular areas are inappropriate. In its 1999 FCC filing OAT enumerated a number of reasons why this calculation does not work for the Pacific Insular Areas. For example:

[6] An informal survey of Federal government grant programs suggests that about 70% of their funded projects have urban hub sites located in cities much larger than 50,000 and not necessarily in the closest city to their affiliated rural sites.

- None of the Pacific jurisdictions have urban populations of 50,000 nor tertiary hospitals with specialty care.
- Part of the FCC's rational for choosing a city of 50,000 as "urban" for calculating subsidy rates was that "an MSA, as defined by OMB, is based in part on counties with cities having a population of 50,000 or more and every state has at least one MSA with a city that size." However, insular areas lack any cities with a population that size and lack counties or county equivalents.
- When the FCC's Universal Service Order was implemented, the decision was made to designate the largest community in each Flag Territory as "urban". However, theses jurisdictions' largest communities are no greater than 2,000 to 5,000 and for the most part do not support any subspecialty and very limited specialty care.
- Moreover, given that in many of the Pacific jurisdictions, all calls are local calls, there is no differential between what the largest communities and smallest communities pay for services.
- Thus, the flag territories, which pay into the universal service fund and are more in need of specialty services than almost any community in the US mainland, receive no benefits from the FCC's Rural Health Care Program (RHCP). In part, this is because there are no cities of 50,000 and the closest large communities that do exist are very small and do not have the needed sub specialists and specialists that could provide services via telemedicine.

Recommendations for Insular areas

Whether or not Congress and the FCC decide to reassess the purpose of the RHCP or make further regulatory changes to the program, Kingston eHealth strongly recommends that the FCC immediately change how it calculates the discount rate for the Pacific Insular jurisdictions by using the urban rate for the closest tertiary hospital with specialists, such as Hawaii and Los Angeles. This change will allow some of the neediest populations in the United States to benefit from the Universal Service subsidy, immediately.

As the FCC implements reforms, Kingston eHealth suggests that the FCC later allow the Pacific Flag Territories to confer with specialists anywhere within the US and offer these jurisdictions a percentage discount rate on transmission costs, limited by an annual cap for satellite transmission costs. Further, we recommend that if the FCC broadens the scope of the RHCP that the US Flag Territories be included in any development of a national public health infrastructure given their critical location, demographics, and poverty level. It has been said that a network is only as strong as its weakest link and certainly, the Pacific Insular Areas could be considered one of the weakest links in the National Public Health Infrastructure.

Other Changes to the Rural Health Support Mechanism (Section III Paras. 51-62)

Streamlining the application process (Section III Paragraph 51)

After five years, two order of reconsideration and few beneficiaries, it is clear that major changes must be considered to truly benefit rural health care providers. Given the times, Congress, the FCC and the Telehealth Industry may wish to review the goals of the program and redirect the purpose of the Program towards supporting the development of an integrated national health network that encompasses not only rural health providers but also urban health providers who all operate at the front lines of public health service.

One of the most efficient ways to redirect, streamline and enhance the Rural Health Care Program application process would be to adopt the Schools and Library Universal Service model. Unlike the Universal Service's Schools and Libraries program, which subsidizes telecommunications networks using a percent rate, the Rural Health Care Program calculates a discount rate, using a comparison of rural telecommunication rates to one-year urban telecom tariffs. In practice, however, the telemedicine hub site together with its rural health care providers can often negotiate lower long-term rural and urban rates for an entire telemedicine project with their telecom provider, thereby eliminating any incentive to pursue a USAC discount rate. Rather than focus upon creating a level-playing field for rural health providers, the FCC along with Congress should consider adopting the Schools and Libraries Program Model for the RHCP to support the development of an integrated national public health infrastructure which to date is in "disarray".

Using this model, the Rural Health Care Program will be able to streamline its application process by:

- Eliminating rural –urban rate differential calculations;
- Eliminating Maximum Allowable Distance calculations'
- Eliminating application processing delays associated with the 28-day waiting period for Telco bidding;

Rural health providers are required to wait 28 days for telecom providers to compete to provide services. Since the Telecom Act of 1996, competition in urban long-distance and wireless telecom markets have brought new and innovative services as well as lower prices to many urban consumers, however local telecommunication service and Inter LATA competition has not yet reached rural America. Over the past seven years, the vast majority of rural health care providers have had few choices in their telecom providers nor have telecom providers shown much interest in competing for Rural Health Care discount programs. Although competition may rear its head in rural communities in the near future, current delays of one month or more for a competitive bid can be expensive to a project that must negotiate rates and test equipment as soon as possible.

SUMMARY OF RECOMMENDATIONS

A. Broaden the scope of the Rural Health Care support mechanism

- Support the development of an integrated national public health infrastructure
- Promote statewide telemedicine consortia
- Include both urban and rural areas
- Provide support for Internet Access
- Allow emergency medical providers to participate

B. **Adopt the Schools and Libraries Universal Service program**, which would allow rural health care providers to negotiate their contracts before USAC pays a percentage of the total cost. The Schools and Libraries program currently pays up to 90% of the total cost of connection.

C. Harmonize the Schools and Libraries Program with the Rural Health Care Program.

- *Harmonizing the School and Libraries Program with the Rural Health Care Program will engender far-ranging benefits. Allowing rural health grantees to share communications equipment and communications lines and to co-locate their Telehealth services in schools will create more incentives to develop state networks. In turn, these state and local*

networks may be the first to provide a coordinated response to national health safety threats and provide a safety net for children throughout each state.

D. Eliminate the rural – urban comparison to calculate the discount rate.

- *By eliminating the Rural Health Care Program's rural-urban differential rate and adopting the Schools and Libraries Program subsidy scheme, the FCC will greatly streamline an inefficient and underutilized program. Telemedicine and Telehealth project will be able to freely negotiate long-term rates for their entire projects with the understanding that some percentage of those rates will be directly subsidized. This will increase the number of eligible health care providers applying to the program and will benefit those in greatest need of FCC Universal Service funding. It will also provide an incentive to keep costs in check. Currently, the benefit of negotiating a lower rate flows to USAC and not to the health provider*

E. Allow Insular Areas to confer with specialists anywhere within the US and offer them a percentage rate subsidy on transmission costs, limited by an annual cap for satellite transmission costs.

F. Streamline the RHCP application process by adopting Schools and Library Program Model

- Eliminates Urban Rate Calculations
- Eliminates need for Urban Area Definition
- Eliminates MAD
- Eliminates Telco competitive bids
- Streamlines subsidy calculations
- Eliminates regulatory delay of 28 days

Thank you for the opportunity to comment on the FCC's Universal Service Rural Health Care Support Mechanism. I hope that these comments are helpful and will provide you with useful insights into the needs of the Telehealth community.

Sincerely,

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